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ABSTRACT

The effects that the state-funded Illinois Regional Area Service Centers have had on education generally and on teacher behavior specifically were analyzed, and a comparison was made with data gathered on the forerunner institution--the demonstration center. In both cases, teachers were asked to write an example of a change that occurred as a result of their interaction with the "change inducing" institution. Multiple raters used specific criteria to catalogue the written responses. The results showed that over 42 percent of the teachers could give a written example of a change in their behavior, a significant increase over the demonstration centers results. (Author)

ILLINOIS AREA SERVICE CENTERS AND THEIR EFFECTS ON TEACHER CHANGE

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This paper analyzes the effects that the state funded Illinois Regional Area Service Centers (hereafter referred to as ASC) have had on education generally and teacher behavior specifically. This analysis will be compared to the previous attempt at teacher change in Illinois -- the Demonstration Center Network.[1] In conclusion, this study aims to make some generalizations about teacher training procedures which lead to change.

Several theoretical frameworks, most notably the Clark-Guba Model for Change, led to the development of a component in the Illinois Gifted Program entitled "Demonstration Centers" (hereafter referred to as DC). This simplistic model implied that teachers and administrators would adopt a model demonstration program viewed under excellent conditions, i.e., enthusiastic students and teachers interacting in activities that are academically valuable.

The uniqueness of the DC's was they were placed in local districts yet funded by the state Office of Education. Originally these sites were to have a short life span; just long enough to usually disseminate its program to visitors.

As with most change agents, this did not happen in the Illinois experience.

> Instead, the center persevered (having experience, expertise, personal contacts and inside information). ...the group cohesiveness was instrumental in establishing the centers during the difficult initiating

> period. This 'grass roots' influence also made local needs strongly felt and made changing the function of the centers very difficult.[2]

The majority of the visitors (3000 teachers, 500 administrators, in 1968-69 school year), were a self-selected subgroup of education personnel who were interested in seeing innovative classes, exploring new ideas -- a group generally amenable to the idea of personal change. A large subset, 40% of the teachers and 32% of the administrators, came to a particular center with the idea they wanted to make a change in their class or school. These visitors observed highly motivating and academically valuable programs which were relevant to their needs and appropriate for a gifted student population.[3] However, over the years it became apparent that exposure and intellectual committment alone were not enough to induce the development of gifted programs among visiting teachers and administrators.

Therefore, the purpose of the centers gradually changed from the dissemination of information about the efficacy of demonstration classes to personalized assistance. The directors and staff of the centers were not only to continually make their visitors aware of the programs and of accepting them psychologically, but also to assist former visitors develop programs for gifted in their own schools. This change in emphasis was handed down to the centers' personnel from the state office. Since the staff of the centers still saw their future career pattern tied to the local district and not the state, there were obvious problems in implementing this new procedure in the old institution. Even though the state office went so far as to even formalize this change by referring to the centers as service and demonstration centers, it was only a facade.

Since the criterion policy for the centers, from their inception, was "exportability," the only way this policy could be accurately evaluated was to examine the school districts served by the centers and see if contact had indeed inspired any action on the part of the visitors. The evaluation of this criterion was approached in two ways: 1) the visitors themselves were questioned at the sites and after various lengths of time after their visit; and, 2) a sample of the target schools was closely evaluated to discover the impact of the DC's.

After the visit, and while still at the demonstration site, the visitors were generally enthusiastic. They were highly satisfied with what they saw and reported that they felt inclined to adopt some aspect of an observed program. The reaction was honest, but misleading because their "...ultimate actions were often severely limited once they returned to the social, economic, and political realities of their own school."[4]

A post-visit questionnaire was sent to 1569 teachers and 271 administrators; 907 or 57.4% of the teachers and 186 or 68.2% of the administrators responded by returning their completed questionnaires. After periods ranging from two months to one year since their visit, the great majority (79%) of visitors were still favorably impressed by the demonstrations and said they saw some activities they would like to implement at home. Somewhat fewer (46%) said they had started incorporating changes.

The criterion item, however, asked respondents to relate a specific, critical indicator of how their behavior had changed as a result of their visit. A panel of three judges independently scored the written comments according to a carefully defined protocol. Being able to give a specific example was considered the best indicator of the short range impact of the DC. About 30% of the 1100 teachers and administrators were able to supply

a concrete example of behavior change. Generalizing from the sample, these DC's affected almost 1000 of the 3500 school personnel who visited to try something new.

A more important question though is the depth and duration of the change. This aspect was investigated through interviews and on-site observations in a 10% sample of the 340 school districts that applied for special reimbursement* monies from the state to initiate local programs for gifted and talented children. Districts participating in the state program for the first time were excluded on the assumption that being first-year districts, they would have little underway.

The results of the observations and interviews produced these results:[5]

1. Teachers in 10% of the districts attributed substantial influence in the development of their programs to help from demonstration center personnel though not visits to demonstration centers. This figure represents a cumulative impact over several years in the target population.

2. When the quality of gifted programs in these districts was related to other variables, there was no relationship between quality of program and visits to demonstration centers or visits from demonstration personnel.

3. Only about 2% of the target reimbursement districts had adopted a demonstrated program in toto -- the original goal of the centers. In fact, little evidence was found of earlier demonstration programs as "new math," even in some districts that had been

* The Illinois gifted program is voluntary and not mandatory for school districts; any school district in the state is eligible to submit a proposal requesting reimbursement funds from the state office. Although school districts are allowed wide latitude in spending funds, the monies may not be used to pay teachers' salaries. The distribution formula takes account of the wealth of the district and the number of gifted pupils being served. Since only very limited funds are ever available to a school district for a gifted program, the monies were always to be put to use for developing and improving the new educational services for gifted children.

> field test sites. At best, districts seldom adopted new programs from demonstration centers, although some attempted to. What resulted was a patchwork of partial adoptions which extended neither to all grades, subjects, or schools in a district nor to all classes within a grade, subject area or school. Changes directly attributable to the demonstration centers tended to be not very far-reaching.

The one main characteristic which influenced visitors to accept an activity and adopt it into their own school situation was divisibility. By "divisibility" it is meant the activities can be used on a limited basis or that parts can be used without necessarily adopting the entire activity. Many individuals were willing to accept something new only if it appeared possible to integrate it into their present system.

Visitors believed that a lack of money and facilities, complex schedule changes, and a shortage of staff kept them from using the activities. These data support the contention that often

> The uniqueness of a demonstration makes it suspect and not at all compelling to the observer. The demonstration presents something that can be done given a highly unusual set of conditions -- it is rigged, so to speak. It neglects to demonstrate to the observer what he can do about the factors in his situation which are different from those in the demonstration setting. The demonstration assumes that rational factors are the only factors to be considered, but the observer knows or should know that there are economic, political, social and other factors involved in bringing about the same change in his system or context. The factors, which are probably the major barriers to change, are not dealt with in the demonstration setting. Demonstration present the 'what' aspects of change and few or none of the 'how' aspects. The observer is presented with a *fait accompli* and he gets none of the information regarding how it was brought off.[6]

What factors operated within the demonstration process to influence a visitor to adopt activities he had seen demonstrated? To answer this question, data was related to whether an individual adopted a demonstration activity from a center. The results showed

> The fact that visitors valued the demonstration programs highly had little relationship with later adoption. Situational constraints in the adopting district seem to be of greater importance than the intrinsic characteristics of the demonstrated program or the process of demonstration itself.

In response to a request by the state office staff, the evaluators of the DC's coalesced several concepts and described a new institution: the ASC.[7] The evaluators stated that the metamorphosis of the DC into the ASC would not be a panacea, only that it was the best alternative available. The remainder of this paper concentrates on the evolvement of the ASC and eventually compares its impact to the previous institution.

A gifted ASC is a program development mechanism which is funded on a contractual basis by the state Office of Education to provide services on a regional basis to districts who receive gifted program reimbursement monies. It has no regulatory or monitoring responsibilities, and instead emphasizes intensive training which should enable teachers and administrators to develop new programs for gifted and talented youth. This inservice training (in which demonstration was used only as one of many techniques,) was often conducted on a continuous basis to provide school personnel with the knowledge and confidence to be advocates for change within their own school system when necessary. The ASC concept encourages adoption of techniques, materials, procedures, etc., to the peculiarities of local districts and not simply the distribution of prepackaged curricula or demonstrations. To do anything else would fly in

the face f the evaluation results which emphatically questioned the impact of the research and development model in which a pre-conceived innovation would be laid upon the passive consumers -- the educators.

In the 1971-72 school year, the Illinois Gifted Program funded eight regional ASC's as well as one for Chicago and a fine arts state service center. A review of the ASC evaluation reports for fiscal year 1971-1972 indicated that each of the ASC's had different objectives and activities and each of their evaluations, legitimately, reflected their local concerns and needs. From this, however, the lack of a statewide perspective about the nature and impact of ASC's was underscored.

It was decided that a survey[8] might provide several levels of information: definitial -- what ASC's have developed into at this time; comparative -- how well do the ASC's match their objectives and activities as stated in their operational proposal submitted to the state gifted office; and catalytic -- indicated by the perceived relationship of the ASC to change as reported by the clientele.

Based on the state guidelines, the annual evaluation reports and other sources, a schematization of an ASC was devised. Many of the elements of the schematization were included in the survey format. The outline presented here summarizes this organizing concept.

I. The Relationship to the State Office of Public Instruction is:

   A. An Annual Contractual Agreement
   B. Based on General Operational Guidelines

II. Fulfilling Such Functions as:

   A. Inservice Training
   B. Program Development
   C. Evaluation Assistance
   D. Dissemination
   E. Change Agent
   F. Program Maintenance

III. Utilizing Such Delivery Systems as:

A. Summer Institutes
B. Workshops
C. Consultant Relationships
D. Demonstration Sites
E. Satellite Centers or Personnel
F. Printed Materials

IV. Dealing With Such Content as:

A. Awareness of Giftedness and Talent
B. Identification of Gifted and Talented Youth
C. Preapproval and Reimbursement Topics
D. Curriculum Development and Revision
E. Teaching Methods
F. Evaluation Techniques and Methods

From this basis a survey instrument was composed.

Each ASC maintains a mailing list. Names are included for a variety of reasons, and do represent a variety of clientele. A minimum sample of 300 names was to be drawn systematically from each list. In addition, all of the reimbursement directors in the ASC's domain were to be polled. The potential sample was more than 300 per center and 3500 for the state. The mailed returns were 1708, or 52%, of the potential sample.

The survey population was asked to respond to 13 items falling into two general categories -- methods of delivery used by ASC's and typical content of ASC activity. The respondents were asked to indicate which of the 13 items they utilized. Table 1 illustrates the utilization of ASC services by the four occupational groups. This table is reported in percentages of each occupation utilizing a service so that some comparison can be made among groups.

Table 1 UTILIZATION OF AREA SERVICE CENTER SERVICES BY CATEGORIES OF POPULATION

Service	Population Category (Stated in Percentage)				
	Teachers	Reimbursement Directors	Administrators	Others	Total
*Workshops, Training Sessions	87	95	76	75	85
*Summer Institutes	32	52	30	25	35
*Visitation to Other Gifted Programs	29	60	50	36	38
Evaluation Assistance	32	55	41	30	36
Program Development and Planning	21	78	61	57	56
Curriculum Development and Revision	34	53	36	36	37
Teaching Methods	54	63	46	42	53
Assistance With Pre-approval & Reimbursement	23	77	44	23	37
*Field Assistance in Classrooms	25	34	30	26	27
Identification of Gifted & Talented Youth	31	43	27	21	32
*Area Service Center Newsletter	48	69	52	39	52
*Area Service Center Material	57	74	53	47	59
*Phone Calls, Correspondence	32	89	60	49	54
Number	1099	297	259	53	1708

* denotes delivery method, unmarked items refer to content

A strong relationship of the ASC's to reimbursement programs is suggested by the several areas where both reimbursement directors and administrators recorded the highest proportions. Visitations to other gifted programs, for example, may be used as an awareness devise, or as a sampling method prior to selection of a gifted program. Evaluation assistance may also fall heavily into the province of a reimbursement director and an administrator where a reimbursement program is underway. Program development and planning often are directed at an administrator or a reimbursement director as is assistance with pre-approval and reimbursement. ASC newsletters may be sent to reimbursement directors and administrators to be passed on to teachers, and phone calls and correspondence most likely are trouble shooting devices. In all, the implication of this is that ASC's provide services that are used by a large proportion of individuals representing authority to support and develop reimbursement programs in schools.

Using the total column it can be seen that workshops are by far the most pervasive service offered by ASC's. A secondary grouping includes ASC materials, program development and planning, phone calls, correspondence, teaching methods, and ASC newsletters.

After indicating utilization, the respondents were asked to rate which of the 13 items they considered to be most beneficial and least beneficial. Different numbers of raters rated each of the 13 items; this was expected. Each respondent had the option to check as few or as many responses as they desired. The numbers in Table 2 represent the percentage of the respondents rating the service as positive with the base number, enclosed in parenthesis, being the total of those choosing to rate that item either positively or negatively.

Table 2

PERCENTAGE OF BENEFICIAL RATINGS
BY OCCUPATIONAL GROUPS

(BASE NUMBERS REPRESENT NUMBERS OF RATERS)

Service	Teachers	Reimbursement Directors	Administrators	Others	Total
*Workshops, Training Sessions	97 % (849)	99% (250)	97% (182)	97% (36)	97% (1354)
*Summer Institutes	95 (370)	88 (127)	80 (71)	85 (11)	91 (635)
*Visitation to Other Gifted Programs	83 (255)	81 (129)	86 (98)	82 (18)	83 (600)
Evaluation Assistance	73 (211)	84 (111)	74 (82)	77 (10)	75 (536)
Program Development & Planning	91 (402)	93 (186)	91 (126)	100 (24)	92 (806)
Curriculum Development & Revision	85 (288)	87 (149)	88 (90)	100 (15)	86 (575)
Teaching Methods	94 (500)	80 (142)	93 (99)	95 (18)	92 (825)
Assistance With Preapproval & Reimbursement	80 (181)	93 (177)	87 (96)	93 (13)	86 (542)
*Field Assistance in Classrooms	75 (200)	67 (69)	73 (61)	73 (11)	73 (468)
Identification of Gifted & Talented Youth	82 (249)	73 (85)	72 (54)	77 (10)	79 (506)
*Area Service Center Newsletter	81 (355)	78 (124)	81 (83)	69 (9)	80 (714)
*Area Service Center Materials	92 (502)	85 (137)	87 (94)	100 (15)	90 (830)
*Phone Calls, Correspondence	79 (260)	94 (188)	92 (120)	94 (15)	86 (676)
*Possible Number	1099	297	259	53	1708

*Denotes delivery method, unmarked items represent content.

In a more informal way, the viewpoints on service of each of the occupational groups in the survey are compared in Table 3.

Table 3 MOST BENEFICIAL SERVICES RANKED AND COMPARED BY OCCUPATIONAL GROUPS

Teachers view...	Reimbursement Directors view...	Administrators view...	Others view...
Workshops and Training sessions	Workshops and Training sessions	Workshops and Training sessions	Program Development & Planning
Summer Institutes	Phone calls and Correspondence	Teaching Methods	Curriculum Development & Revision
Teaching Methods	Program Development & Planning	Phone calls and Correspondence	ASC Materials
ASC Materials	Assistance with Preapproval and Reimbursement	Program Development & Planning	Workshops and Training sessions
Program Development & Planning			Teaching Methods
			Phone calls and Correspondence
			Assistance with Preapproval & Reimbursement
...as being most beneficial.			

Using correlational techniques on the survey information, additional relationships are found. The magnitude represented by the following numbers are strong considering the large number sampled in the survey. Positive ratings on workshops and training sessions were related to positive ratings on teaching methods (.49). Those giving positive ratings to evaluation assistance also tended to rate program development and planning

positively (.47). Positive ratings of phone calls/correspondence are related to positive ratings on program development/planning (.43); positive ratings of phone calls/correspondence are related to positive ratings on assistance with pre-approval and reimbursement (.45); and program development and planning and phone calls (.43) have positive interrelationships.

As an indicator of what the impact of ASC's might be, the survey form asked respondents to provide a specific example of change as a result of contact with the ASC. The examples were read by a panel of judges and coded in two ways. First, examples were analyzed to determine the attitude indicated in the reply. Was the attitude generally negative or positive? Six-hundred-fifty-one (38%) respondents chose not to reply to this item, only 65 (4%) were negative in tone, and a majority amounting to 992 (58%) of the 1708 respondents were positive in tone.

Using the same carefully defined protocol that had been used several years earlier in the analysis of the impact of the DC, a second coding of the responses categorized the examples into two categories -- general or specific. A coding of specific was given to examples citing an illustration of the nature of a personal change. Not surprisingly, the larger proportions of specific examples were provided by teachers and reimbursement directors (see Table 4).

Table 4 EXAMPLES OF CHANGE BY OCCUPATIONAL GROUP

	Group				
Example	% of Teachers	% of Reimbursement Directors	% of Administrators	% of Others Specified	% of Total
Specific	42	41	22	30	38
General	23	26	24	26	24
No response	35	33	54	43	38
Number	1099	297	259	53	1708

By way of illustrating what these attitudes were and what kinds of changes were reported, a selection of quotations is presented below.

Positive attitudes existed toward the ASC from initial involvement with reimbursement aspects of the Illinois Gifted Program...

> We are new in the Gifted program and have just started to implement some of the ideas we have picked up while working with our Area Service Center. Almost without exception, all of our teachers have begun to look at different ways to reach the Gifted child. I believe that our in-service training workshops have been the main catalyst in bring about this change.

...to terminal contacts with the Illinois Gifted Program:

> We are a small unit district and dropped out of the program due to the excessive amount of "write-up" required. Our ASC personnel were helpful in getting a workable pre-approval accepted. Our program consists primarily of in-service training and relies almost entirely on the services of the ASC. Their efforts have made a definite impact on our school. The teachers <u>are</u> much more aware of the individual differences in children and <u>are</u> making efforts in the classroom to help students reach their potential as individuals as a result of Gifted Program training.

The initial sentence of the quote above alsc gives an indication of the nature of many negative comments received in the survey. Rather than discontent with the ASC, writers often indicated difficulties related to reimbursement. Small districts especially indicated financial restrictions due to an assessed evaluation basis for reimbursement.

> We have too few students which makes it economically unfeasible for us to maintain a program. Therefore, we are no longer participating in the program.

Other negative comments more directly reflecting on ASC's point out the constraints due to the limited funding of the ASC's:

> I feel that the program could be strengthened and be more effective if a follow-up of the workshops by field assistance in the districts and to some extent in the classrooms was initiated.

Due to funding levels each of the ASC's operated with only three or four consultants to cover as much as 25 counties and 1,000 square miles as well as 79 school districts.

Another type of criticism of ASC's is also related to the limited personnel available:

> It seems most of the services and materials are slanted for the elementary schools rather than high schools.

As opposed to the few identifications of constraints many reports of a wide range of services were submitted. One administrator devised the following chart to illustrate the impact of his ASC in each of the 13 categories suggested by the survey form. This chart shows one individual's view of the broad impact the ASC has had on his school.

ACTIVITY	Nature of the Change	Effect
Workshops, training sessions	Change in teachers' way of teaching, materials used	Positive effect for the students
Summer Institute	Dissemination of ideas to other staff members	Faculty awareness
Evaluation Assistance	Group meeting with directors to write evaluation into pre-approval applications	Concise, accurate application with no excessive clerical requirements
Program Development & Planning	ASC help with method of establishing identification criteria, evaluation model, inservice plans, & special instructional approaches for gifted	Classes begun at Jefferson, Junior High, & High School attendance centers
Curriculum Development & Revision	Development of plans for elementary & junior high groups regarding materials for instruction	Special materials chosen for use in instruction both enrichment & additional
Teaching Methods	Creative Teaching, Seminar On Strategies, single workshops multiple talent ideas all implemented by teachers	Improved teaching techniques & methods
Assistance with Pre-Approval & Reimbursement	Workshops to give guidelines & a method of writing	Better ideas on part of the directors as to what to include
Identification Of Gifted & Talented Youth	Total staff participation in identification, using criteria developed by the gifted committee	Better support for program and greater participation.
ASC Newsletter	Involvement in meetings and in-service	Greater interest on part of staff in program
Phone calls, Correspondence	Special problems cleared up, questions answered	More efficient operation of day to day activities and prompt answers to questions

Specific examples of change often included individualized instruction, as disseminated by the ASC's.

> In small group discussion, I learned of ways to implement individualized programs in math, reading, and language arts. Packets of information which were distributed also proved to be helpful. The ideas were used in second grade classrooms. Many positive goals were achieved by the children...

Out of the 1057 written examples, 218 or roughly 20%, spontaneously referred to individualization.

Since these examples were coded identically to those of the demonstration centers, enough comparable data exists to make some comparison between these two potential change agent institutions. Table 5 illustrates the comparison of data.

Table 5 STATEWIDE COMPARISON OF EFFECTIVENESS BETWEEN AREA SERVICE CENTERS AND DEMONSTRATION CENTERS AS TRAINING AGENTS

	Teachers		Administrators		Total	
	DC*	ASC**	DC*	ASC**	DC*	ASC**
Specific Example	30%	42%	25%	32%	29%	38%
General Example	22%	23%	16%	23%	20%	24%
No Response	48%	35%	59%	45%	51%	38%
Total Number	907	1099	186	556	1093	1655

* Demonstration Centers
** Area Service Centers

One has to keep in mind while looking at the above table that it is quite easy to merely check a box indicating that "yes, I have changed" while it is quite another activity to write a specific example of change in the classroom. The data seems to clearly indicate:

1. Many more of the ASC respondents were able to attempt a written response than DC respondents (51% to 38%).

2. Teachers (by 12%) and administrators (by 7%) both are able to point to more specific examples of personal change as a direct result of their interaction with an ASC activity.

3. The total percent of increase (29% to 38%) would tend to justify the switch from DC to ASC, if change is a criteria for success.

While the above data is tentative, it provides a baseline on which to analyze further development in the ASC as a change agent in local education. It is also, we believe, unique longitudinal data on how personnel in local district programs perceive a statewide state supported vehicle for program development.

The previous pages have analyzed two institutions that have effected change through inservice training in the public school system. While the paper has discussed the concept of change, it has not stated a definition; it will not attempt to do this. This is a task that others have spent years in analyzing and volumes in describing. Instead, this report looks at change in terms of the definitions of each of the respondents.

This approach has several limitations, but any other analysis would require a very sophisticated longitudinal study which is beyond the scope of this paper. It would be ideal if the data could be interpreted in terms of:

1. A description of the school environment that ASC and DC clientele work in so that a comparison of the relative constraints of the local situation could be analyzed.

   The market structure of the public school industry has a major effect on schools' decisions to adopt innovations; while the bureaucratic structure and incentives of schools shape in specific ways the transition from adopting innovations to implementing them.[9]

2. A description, preferably through the eyes of an observer utilizing some standardized classroom observation procedures, of the curriculum, the environment of the school in both pretreatment and posttreatment situations.

Changes by school personnel, as a result of inservice training interactions with an institution such as an ASC, will always be difficult to define because the educator may be just beginning to accept the concept that new approaches exist (and therefore exhibit only imitative behavior) or may be at the end of an accumulated series of interactions which have made the educator an "innovator" in the local district.

Also, the same "treatment" in terms of services and consultation assistance by the ASC may affect educators in the same school (with similar backgrounds and experience) in two entirely different ways. While one may be open immediately to explore new ideas, the other will remain closed and structured forever.

Spodek and Manolakes,[10] in their report on inclass teacher training for open education, talk about the "layering" of teachers.

The 'layering' of teachers -- As we have worked with teachers during the past few years in the process of teacher change, we have found that just as the change process is a complex phenomenon, so the teacher as well is a complex phenomenon. Teachers who have volunteered to work with us accept change, yet the process of change moves along in fits and starts. At certain periods the process of change moves smoothly as teachers are willing to modify structures and practices. At other times it seems as if a great deal of resistance to change is building up in the teacher even when the change has been verbally accepted. Nor could each teacher change in the same way or at the same rate.

Our original idea of a plateau affect to explain the process of teacher change has begun to change towards what we are calling the 'onion construct.' Teachers may be viewed as being made up of various levels. The external levels might include accepted room arrangements, specified selected texts, classroom materials, etc. Closer to the core come specific instructional strategies. Further in some goals for teachers. (Within the core of the teacher are a set of professional beliefs and values, beliefs about the nature of childhood, the nature of education or schooling, the role of the teachers, and so on.) Further still internally (are a set of personal beliefs and values which we feel are outside our domain to deal with and modify.) This 'onion construct' is consistent with the view of values presented by Wlodarczyk and the map of classroom culture hypothesized by Hirabayashi, both members of our group.

It seems to us that the degree of ease or difficulty associated with the process of change of a particular characteristic of a teacher's method is a function of the distance of that characteristic from the internal professional core of the teacher. Characteristics in the external layers of the teacher are more responsive to external stimuli or pressures, hence they are easier to change. (For example, teachers seldom resist reorganizing the physical structure of the classroom or creating activity centers.) As we move to deeper layers, greater resistance to change is felt. (It is harder to effect the reading program than the science program.) And characteristics closest to the internal layers of beliefs are even more resistant to change, (It is difficult for many teachers to share real decision-making power with their children.) Understanding the depth of layering of a particular practice might help the advisor to develop more effective strategies for change as well as help him accept resistance and difficulties related to certain kinds of change.

Sample statements[11] from the school personnel who utilize ASC's include examples that may illustrate both external and internal "layers of change." To the individual respondent the most superficial layer may be as significant a change to him as the radical change for a core belief may be for another teacher. To this extent, change, like beauty, is in the eye of the beholder.

In summary, one could say that the ASC has utilized the strengths of the DC model, but has developed a more individualized approach to identifying and servicing the training needs of teachers and administrators. There are many who say that the universities are unable to provide continuous and congruous inservice programs for local school districts and that most local districts do not have the time nor resources in terms of personnel or money to adequately do the job for themselves. The ASC, because it can adopt to the needs, the sophistication, the knowledge level of the school and the teachers, can potentially fulfill the posttraining gap for educators.

The advisory approach[12] to the inservice education of teachers is another model to consider. It is a set of inservice training strategies characterized by:

1. providing inservice assistance to teachers only when such assistance has been requested by them.
2. providing assistance in terms of the requestors' own goals, objectives and needs.
3. providing such assistance in situ rather than in courses, institutes or seminars.
4. providing assistance in such a way as to increase the likelihood that teachers become more self-helpful and independent rather than helpless and dependent.

The advisory model, while potentially effective, is inherently limited to working with a small number of individuals and open to two questions:

Is the cost of supporting such a system worth the payoff in terms of number of individuals effected; and, isn't the advisory most effective when used as the follow-up to educators who have received comprehensive training? Perhaps a combination of the ASC and advisory approaches may hold promise as the most feasible way to work with large numbers of school personnel, yet still have the opportunity to focus on a target population. This combination could provide part of the support system that the local teacher and administrator will need if the training they have received induces them to attempt a change from the status quo.

Future studies that center on the development and implementation of teacher centers[13] in America may wish to utilize the Illinois experiences as a criterion reference of what can be done and what can be expected. Also, while the ASC's described in this paper have concentrated on working with teachers of gifted children, it seems plausible that the same model could apply as well to educators who work in the specialized areas of educationally disadvantaged (Title I) and handicapped children, as well as general education.

FOOTNOTES

1. Thomas Kerins, Ernest R. House, Steven Lapan, Joe M. Steele, Demonstration Process Factors Leading to Adoption of Innovations. Paper presented at the annual meeting of the AERA meeting, Feb 71.

2. Ernest R. House, Thomas Kerins, Joe M. Steele, The Demonstration Center: An Appraisal of the Illinois Experience. CIRCE, University of Illinois, Urbana, Dec 70.

3. Ibid, page 16.

4. Ibid, page 18.

5. Ibid, page 27.

6. John J. Horvat, Content and Strategies of Communication in Current Educational Change Efforts. A presentation for AASA, Feb 67.

7. House, Ibid, page 38.

8. OSPI, Annual Gifted Program Evaluation Report 1972-1973, Springfield, Illinois. Nov 73, 243 pages.

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